

We acknowledge and respect that we are gathered on the traditional lands of the Anishnaabe People of Turtle Island and proudly recognize our local host Atikameksheng Anishnawbek. We also recognize the contributions of Wahnapiatae First Nation and the Metis Nation of Ontario.

Course Title	Tools Materials and Safety				
Course Code:	CCT1300	Credit Value:	3	Credit Hours:	42
Programs:	CALC Carpentry Dual Credit – Manitoulin Campus CFDC Carpentry – Dual Credit				
Equivalencies		Prerequisites		Corequisites	

This course may be delivered in a variety of different formats: 100% in-class, 100% online (or a blend of both), videoconferencing, distributed learning or off-campus. Please confirm with your faculty member which format will be used for your section of this course.

General Education Course:	☐	Eligible for PLAR:	☒
Degree Breadth Course:	☐	Experiential Learning:	☐
Research Intensive Course Designation:	☐		

COURSE DESCRIPTION

In this course, students will The students will learn how to select and safely use a variety of hand tools, portable power tools, stationary tools and equipment. The students will be introduced to the different types of materials and fasteners used in the construction industry.

Date: May 28, 2026

Approved by: 

ANGELA GILMORE
 Chair, Skilled Trades, Engineering
 Technology And Environmental Studies

Effective: Fall 2026, Winter 2027, Spring 2027

RELATIONSHIP TO PROGRAM VOCATIONAL LEARNING OUTCOMES

PROGRAM LEVEL
This course contributes to your program by allowing you to demonstrate the following vocational learning outcomes:

COURSE CURRICULUM**Topics/Concepts Covered in This Course**

- Safety
- Hand Tools
- Stationary Power tools

COURSE LEVEL: Learning Outcomes and Objectives	
To earn credit for this course, you must reliably demonstrate your ability to:	
Learning Outcome	Objectives
1. Assess health hazards and safety risks in the carpentry field	1.1 Select, wear and maintain personal protective devices. 1.2 Apply safety measures in the shop and in the field by using appropriate measures for lifting and handling material and equipment. 1.3 Apply fire safety practices in the workplace
2. Determine materials and their use for residential construction	2.1 Identify the different types of panel stock such as plywood, O.S.B, composite board, M.D.F and state their use and applications 2.2 Identify the characteristics of wood and lumber 2.3 Describe the different methods to cut trees into lumber 2.4 Describe the different methods to cut trees into lumber 2.5 Identify structural and non structural rated panels as well as engineered wood products. 2.6 Identify structural and non structural rated panels as well as engineered wood products.
3. Implement procedures to produce various wood joints.	3.1 identify types of wood joints and state their respective applications. 3.2 select and use appropriate fasteners, adhesives and glues 3.3 apply measuring procedures, layout and cutting tools to produce specified wood joints and connections

Learning Outcome	Objectives
4. Implement the proper use of hand tools.	4.1 identify common hand tools for measuring and layout, such as tapes, squares, sliding T bevels, chalk lines etc.
5. Explain how to use boring and cutting tools and demonstrate their use.	5.1 identify different bench planes, block planes and chisels as well as proper honing and sharpening techniques 5.2 identify and use cutting tools such as aviation snips, tin snips, utility knives and scrapers 5.3 identify and use different saws such as rip and crosscut, as well as coping and keyhole
6. Explain how to operate portable power tools and demonstrate their use.	6.1 identify and use of electric saws such as the circular saw, sliding compound mitre saw, reciprocating saw and jig saw 6.2 identify and use drills and drivers, corded and cordless 6.3 identify and use planes, routers, sanders, and plate jointers 6.4 identify and use pneumatic nailers and compressors
7. Explain how to operate stationary power tools and demonstrate their use.	7.1 Demonstrate the proper use of cabinet table saws 7.2 demonstrate the proper use of thickness planers 7.3 Demonstrate the proper use of band saws and drill presses 7.4 Demonstrate the proper use of 6 in and 8 in Jointers

Essential Employability Skills

Communication

- respond to written, spoken, or visual messages in a manner that ensures effective communication.

Numeracy

- execute mathematical operations accurately.

Critical Thinking and Problem Solving

- use a variety of thinking skills to anticipate and solve problems.

Information Management

- analyze, evaluate, and apply relevant information from a variety of sources.

Interpersonal

- interact with others in groups in ways that contribute to effective working relationships.

Personal

- take responsibility for one's own actions, decisions, and consequences.

Delivery Method

- Classroom: Course is delivered through scheduled synchronous teaching that may be face-to-face and/or virtual.

Learning Activities

- Lectures
- Class Discussions
- Labs
- eLearning Components

Resources Required

Additional Supplies

10" pull saw irwin
 Packout 15" tool bag
 Carpenter Pencil (11 pc)
 2-Pk Milwaukee 7" Rafter Square
 nail set 1/32 2/32 3/32
 10 pcs geometry set
 100' CHALK LINE
 Hammer Milled 17oz
 M18" Compact Brushless 2-Tool Combo Kit
 empire combination square
 16"x24" Aluminum Framing Square Milwaukee
 Irwin Marples Blue Chip Woodworking Chisels 4 pcs
 18 pcs driver bit set
 Empire Bevel
 25" tape with fractions

Evaluation Plan

Grading Scheme

A	80% - 100%
B	70% - 79%
C	60% - 69%
F	0% - 59%

Evaluation Method	Value (%)
Test/Exam	20%
Test worth of equal weight - 20%	
Applied Activities (G)	50%
3 Projects worth 50%	
-Hand joints - 15%	
-Machine joints - 10%	
-Table -25%	

Evaluation Method	Value (%)
Assignments	20%
4 Assignments worth 20% (valued equally)	
Professional Conduct	10%
Professional Conduct worth 10% Professional conduct is central to the objective of developing a respectful and professional atmosphere in and around the classroom/Lab. This mark is based on preparedness for classes, interaction with peers/faculty, adherence to safety requirements/policies and overall professionalism in class.	

ADDITIONAL INFORMATION

A course outline is the College's commitment to the students. It supports educators, students, employers, and external partners in determining the depth of knowledge and level of performance that a student will be able to demonstrate upon successful completion of a course. Both instructor and student are obligated to follow the content of the course outline. It is your responsibility to meet these outcomes as assigned.

Note: You should maintain a copy of this course outline for your records. You may require this course outline if you seek transfer credits or further studies at other institutions.

Cambrian Email Addresses

All email correspondence with currently registered students must be via the students' College-issued email, as per the College's [IT Acceptable Use Policy](#). Students must familiarize themselves with the IT Acceptable Use Policy, as it outlines the acceptable use of College information systems and technology, and mitigates risks to the College's IT infrastructure.

Bring Your Own Device (BYOD) and Apps Anywhere

Cambrian College is a BYOD institution, which means that students bring the device of their choice that meets program-specific minimum technology requirements. Program-specific minimum technology requirements can be viewed on program pages on the Cambrian College website. AppsAnywhere is an easy-to-use app store-like platform providing students with a way to access their College apps and software on demand, anywhere, anytime both on and off campus. These both enrich the student learning experience in and out of the classroom, while providing maximum flexibility.

Policies

It is the student's responsibility to be aware of the College's policies. Policies, procedures and forms can be found on the [College website](#).

Academic and Student Services

Cambrian has a variety of student and academic services to support students during their academic journey at the College.

- [Academic Integrity Office](#)
- [Academic Success Centre](#)
- [Bookstore and Campus Store](#)
- [International Student Support Services](#)
- [KPMG Pride Centre](#)
- [Career Centre](#)
- [Registrar's Office \(Enrolment Centre\)](#)
- [First Step Centre](#)

- [Accessibility Services](#)
- [Library](#)
- [Pathways](#)
- [Available Scholarships and Bursaries](#)
- [Cambrian Student Council \(CSC\)](#)
- [Cambrian Indigenous Student Circle \(CISC\)](#)
- [Cambrian Athletic Association \(CAA\)](#)
- [Student Life Centre](#)
- [Test Centre](#)
- [The Learning Centre \[Tutoring Services\]](#)
- [Wabnode Centre for Indigenous Services](#)
- [Women's Resource Centre](#)

Copyright

Copyright is the exclusive legal right given to a creator to reproduce, publish, sell, or distribute his/her work. All members of the Cambrian community are required to comply with Canadian copyright law, which governs the reproduction, use and distribution of copyrighted materials. This means that the copying, use and distribution of copyright-protected materials, regardless of format, are subject to certain limits and restrictions. For example, activities such as photocopying or scanning an entire textbook or uploading class materials to a course sharing site are prohibited.

See the [Cambrian Library website](#) for additional information regarding copyright and for details on allowable limits.

Audio/Visual Capture

Sounds and images from this class, and contributions made by a participant, virtually or in-person, are recorded under the authority of the *Ontario Colleges of Applied Arts and Technology Act, 2002*. The main purpose of these recordings is to allow students enrolled in the course to review content and engage in activities, whether they attend any given class in person, virtually, or at all. Class recordings are for personal use only and shall not be shared or transferred. Faculty may also review these recordings to prepare for future classes, evaluate students, collaborate in program reviews, or provide feedback to faculty and/or students. Any questions about the use of multimedia recordings may be addressed to your respective Dean.

Equity, Diversity, and Inclusivity

Cambrian is committed to building and preserving an equitable, diverse, and inclusive learning community where students, faculty, and staff may achieve their full potential in an environment characterized by equality of respect and opportunity. All students and employees have the right to live and work in an environment that is free from discrimination and harassment. Therefore, Cambrian College will not tolerate any form of discrimination or harassment in its employment, education, accommodation, or business dealings. For more information, please visit: [Equity, Human Rights, and Accessibility](#).

Prior Learning Assessment and Recognition (PLAR)

Students wishing to have work or life experience that meets course learning outcomes considered for credit through Prior Learning Assessment and Recognition should email the Enrolment Centre at records@cambriancollege.ca.

Transfer Credit

Students wishing to have courses from other programs or institutions assessed for equivalency and/or transfer credit should visit the [Transfer Credits page](#) on the Cambrian website. The student should maintain a copy of this course outline for their records. Students may require this course outline if seeking transfer credits or further studies at other institutions.

Test Proctoring at Cambrian

Many courses include major tests and/or final exams. The practice at Cambrian requires that these types of test situations involve proctoring to ensure academic integrity. Online tests/exams may employ a proctoring services to enable you to take your exam from a location of your choosing within a period specified by your instructor. When you are taking an online test/exam, the proctoring service may capture your video, screen, audio, and web surfing data to protect academic integrity. Cambrian College collects, uses, discloses, and retains personal information in compliance with the *Freedom of Information and Protection of Privacy Act (FIPPA)*. Your personal information is being collected under the authority of the *Ontario Colleges of Applied Arts and Technology Act S.O. 2002, c.8, Sched. F*. This information will be used for the purpose of administering a test/exam through an online proctoring service acting as an authorized agent of the College. Please refer to Cambrian's [Official Student Records Policy](#) for more details. If you have any questions regarding the collection of your personal information, please contact Vice President Academic, Cambrian College, 1400 Barry Downe Rd., Sudbury ON P3A 3V8, 1-705-566-8101 ext. 6245.